

1 **WHAT IS CLAIMED IS:**

2 1. In a bicycle sprocket wheel having a sprocket wheel body provided with teeth
3 formed on an outer periphery thereof to adapt to a bicycle chain so as to be driven to
4 rotate by the bicycle chain, a driving ring received in the sprocket wheel body, a sleeve
5 adapted to engage with a rear wheel of the bicycle so as to rotate simultaneously with the
6 rear wheel and being inserted into the driving ring to engage with a side pad, wherein the
7 improvements comprise:

8 the driving ring is so configured that the driving ring is selectively rotated with
9 the sprocket wheel body in a noise-free manner.

10 2. The bicycle sprocket wheel as claimed in claim 1, wherein the driving ring
11 has multiple partitions so as to define therein multiple through holes to receive therein
12 multiple driving blocks, each driving block has a length L slightly larger than a length of
13 the through hole, a width W slightly smaller than a width of the through hole, and an
14 arcuate top face,

15 whereby the top face of each of the driving blocks is selectively engaged with an
16 inner periphery of the sprocket wheel body and a bottom of each of the driving blocks is
17 securely engaged with an outer periphery of the sleeve so that when the sprocket wheel
18 remains still and the sleeve is rotated by the rear wheel, the driving blocks are tilted and
19 thus the top faces of the driving blocks are free from engagement with the inner
20 periphery of the sprocket wheel body.

21 3. The bicycle sprocket wheel as claimed in claim 2, wherein the side cap has a
22 ball receiving recess defined to correspond to a first annular recess formed on one side of
23 the sprocket wheel body so as to receive therein balls.

24 4. The bicycle sprocket wheel as claimed in claim 3, wherein an annular pad is
25 sandwiched between the side cap and the sprocket wheel body.

1 5. The bicycle sprocket wheel as claimed in claim 2, wherein each driving block
2 has a cutout defined in a mediate portion thereof and each of the cutouts correspond to
3 and align with one another so as to receive therein an elastic belt to secure the driving
4 blocks in the sprocket wheel body.

5 6. The bicycle sprocket wheel as claimed in claim 3, wherein each driving block
6 has a cutout defined in a mediate portion thereof and each of the cutouts correspond to
7 and align with one another so as to receive therein an elastic belt to secure the driving
8 blocks in the sprocket wheel body.

9 7. The bicycle sprocket wheel as claimed in claim 4, wherein each driving block
10 has a cutout defined in a mediate portion thereof and each of the cutouts correspond to
11 and align with one another so as to receive therein an elastic belt to secure the driving
12 blocks in the sprocket wheel body.